

RoamAbout® AP4102



- Supports an 802.11b/g radio card and an 802.11a radio card, for a migration path to 802.11a, as well as support for heterogeneous client environments
- Offers enhanced security with WPA2, AES, WPA, WEP 802.1X User Authentication with key distribution, and more
- Provides a 10/100 Ethernet uplink to support multiple high-speed radios
- Meets international requirements with DFS/TPC support, 802.11h

- **Multi-technology architecture**
 - Includes an 802.11b/g (2.4 GHz) and an 802.11a radio card (5 GHz) for maximum throughput
- **Enhanced security**
 - Supports 128-bit WEP/WPA and AES/WPA2
 - Supports 802.1X User Authentication with Key Distribution
 - NetSight Policy Support
 - Supports 64 VLANs based on PVID (RFC 3580) assignments and 802.1X authentication
 - Supports per-session/ per-user encryption
 - Rogue AP detection and prevention
 - Virtual AP functionality allows for up to 16 SSIDs with unique authentication and encryption
- **Multiple management options**
 - Supports NetSight, SNMPv3, Telnet, web-management and a standard CLI
 - Supports networks with up to thousands of wireless nodes
- **Remote power reduces costs**
 - Supports 802.3af Power-over-Ethernet in unused pairs and in-data pairs
- **Antenna Options**
 - Dual Antenna diversity
 - External antennas for indoor and outdoor
 - Point to Point and Multipoint

Multi-Technology, Fully Standards Compliant, Wireless LAN Access Point

The RoamAbout AP4102 is Enterasys' premier access point and contains both "A" and "B/G" radios, Secure Networks policy capabilities, the latest encryption algorithms, and both internal and external antenna support. Highly flexible, the AP4102 is able to operate in standalone AP mode, point-to-point and point-to-multipoint-mode, and as a thin AP with the RBT-8X00 wireless switches.

The RoamAbout AP4102 offers enhanced security features such as WEP, WPA (Wi-Fi Protected Access), AES, WPA2 and SNMPv3, as well as manageability features that include NetSight® Console, NetSight Policy Manager and NetSight Inventory Manager support, secure web management and secure Telnet management, including the standard CLI interface. At the same time, enhanced access control gives network managers complete control over who connects to the network.

The AP4102 includes two external antenna connectors for use with both indoor and outdoor antennas. The AP4102 also supports both point-to-point and point-to-multipoint connections.

As an active participant in a Secure Network, the AP4102 leverages NetSight Policy Manager to allow for the creation of

Layer 3 and Layer 4 allow/deny rules for a user based on 802.1x authentication at the edge of the network.

The RoamAbout family of products allows you to establish a secure, high-performance wireless data LAN network quickly, easily, and economically. Users of IEEE 802.11a-, 802.11b-, and 802.11g-compliant wireless products can easily integrate multiple vendors' client devices, supporting full interoperability and making wireless communication effortless. Since RoamAbout uses the ISM band (Industrial, Scientific and Medical) with 2.4 GHz and 5 GHz frequency bands, no US FCC license is required. In addition, with an initial country code setting and support for DFS/TPC, 802.11h, RoamAbout meets ETSI and other international standards. Based on the country setting, the RoamAbout Access Point will allow only usage for channels that are allowed in the specified country.

With its competitive price, the RoamAbout AP4102 is ideally suited to customers seeking to expand their existing wireless LAN infrastructure, or for those customers who would like to implement a wireless LAN.

The AP 4102 can also be loaded with thin code so that it can work with the RoamAbout wireless LAN switches (RBT-8X00).

Specifications

Technical Specifications

802.11a

Frequency Band

5.15 – 5.25 GHz (low band) U.S. (FCC), Canada, Japan and parts of Europe

5.25 – 5.35 GHz (mid band) U.S. (FCC), Canada, Japan and parts of Europe

5.50 – 5.70 GHz Europe band

5.725 – 5.825 GHz (high band) U.S. (FCC) and Canada

Modulation Technique

BPSK, QPSK, 16-QAM and 64-QAM (OFDM)

Media Access Protocol

CSMA/CA (Collision Avoidance) with ACK

Data Rate

54 Mbps with fall back to 48, 36, 24, 18, 12, 9 and 6 Mbps per channel

Output Power

20 dBm at 5.15 – 5.35 GHz (except at 48 and 54 Mbps output is 18 dBm)

20 dBm at 5.50 – 5.70 GHz

(except at 36 and 54 Mbps output is 17 dBm)

19 dBm at 5.725 – 5.825 GHz

(except at 48 and 54 Mbps output is 18 and 16 dBm)

Receiver Sensitivity

-70 dBm at 54 Mbps	-83 dBm at 18 Mbps
-73 dBm at 48 Mbps	-86 dBm at 12 Mbps
-76 dBm at 36 Mbps	-87 dBm at 9 Mbps
-80 dBm at 24 Mbps	-88 dBm at 6 Mbps

802.11b/g

Frequency Band

2.4 – 2.83 GHz U.S. (FCC), Canada, Europe (ETSI)

2.4 – 2.497 GHz Japan

Modulation Technique

802.11b: CCK, DBPSK, DQPSK (DSSS)

802.11g: BPSK, QPSK, 16-QAM and 64-QAM (OFDM)

Media Access Protocol

CSMA/CA (Collision Avoidance) with ACK

Data Rate

802.11b: 11 Mbps with fall back to 5.5, 2 and 1 Mbps per channel

802.11g: 54 Mbps with fall back to 48, 36, 24, 18, 12, 9 and 6 Mbps

Output Power

802.11b: 20 dBm across all frequencies

802.11g: 20 dBm across all frequencies (except 19dB at 54 Mbps)

Receiver Sensitivity

802.11b:

-85 dBm at 11 Mbps
-87 dBm at 5.5 Mbps
-89 dBm at 2 Mbps
-90 dBm at 1 Mbps

802.11g:

-70 dBm at 54 Mbps	-84 dBm at 18 Mbps
-73 dBm at 48 Mbps	-85 dBm at 12 Mbps
-76 dBm at 36 Mbps	-86 dBm at 9 Mbps
-80 dBm at 24 Mbps	-88 dBm at 6 Mbps

Antennas

Internal antennas: dual-band diversity antennas

External antennas: One reverse polarity SMA connector for 802.11a band; one reverse polarity SMA connector for 802.11b/g band

AC Power Supply

Input: 120-240 VAC; 13.2 watts

Output: 5.1 VDC, 3A

Power over Ethernet (DC)

48VDC, 0.22A, 10.8 watts

Interfaces

Wired 10/100 Mbps with full auto-negotiation

Console port RS232

Two reverse male SMA connectors

Specifications (continued)

Physical Specifications

Dimensions

21.83 cm (8.6") L x 13.73 cm (5.4") W x 3.27 cm (1.3") D

Weight

0.8 kg (1.76 lbs) (weight does not include plastic décor cover)

Environmental Specifications

Operating Temperature

0° C (32° F) to 55° C (131° F)

Non-Operating Temperature

-20° C (-4° F) to 80° C (176° F)

Operating Humidity

5 to 95% non-condensing

Altitude

-60 meters (-200 feet) below sea level to 4,000 meters
(13,125 feet) above sea level

Safety

UL 60950, CSA 60950, EN 60950, EN 60825 and IEC 60950
UL 2043 (without decorative cover)

Electromagnetic Compatibility

47 CFR Parts 2 and 15, CSA C108.8, EN 555022, EN 55024, EN 300 328, EN 300 893, EN 301 489-17, EN 301 489-1 and VCCI V-3

Ordering Information

RBT-4102

RoamAbout AP4102 wireless access point

RBT4K-AG-IA

Indoor range extender antenna for both 2.4 GHz and 4.9 - 5.9 GHz bands

RBTBJ-AW

RoamAbout 802.11a/b/g multimode PC radio card for client (worldwide except Japan)

RBTBJ-AJ

RoamAbout 802.11a/b/g multimode PC radio card for Japan

RBTBX-PC

RoamAbout PCI carrier card (requires RBTBJ-AW or RBTBJ-AJ)

Wireless Switches

RBT-8100

RoamAbout wireless switch, supports 24 access points

RBT-8400

RoamAbout wireless switch, supports 40-120 access points

RBT-NMS-50/200/UNL

RoamAbout wireless switch management software

RBT-RFPLAN

RoamAbout RF planning tool, used with wireless switch products.

Lightening Protector

RBTES-AG-LPM

Dual-band lightening protector with reverse N male connectors

Outdoor Cables

RBT4K-AG-PT20F

20" pigtail for the RoamAbout RBT-4102 with reverse SMA female to reverse N female

RBT4K-AG-PT20M

20" pigtail for the RoamAbout RBT-4102 with reverse SMA female to reverse N male

RBTES-L200-C20F

20' LMR 200 cable with reverse N female connectors

Ordering Information (continued)

RBTES-L400-C50F

50' LMR 400 cable with reverse N female connectors

RBTES-L400-C75F

75' LMR 400 cable with reverse N female connectors

RBTES-L600-C25F

25' LMR 600 low-loss cable with reverse N female connectors

RBTES-L600-C50F

50' LMR 600 low-loss cable with reverse N female connectors

5 GHz Antennas

RBTES-AW-S1590M

4.9 GHz-5.8 GHz – 15dBi gain at 90 degree and 16dBi gain at 60 degree sector antenna with reverse N male connector

RBTES-AM-M10M

5.3 GHz – 10dBi omni directional antenna with reverse N male connector

RBTES-AH-M10M

5.7-5.8 GHz – 10dBi omni directional antenna with reverse N male connector

RBTES-AH-P23M

5.8 GHz – 23dBi panel antenna with reverse N male connector

2.4 GHz Antennas

RBTES-BG-M08M

8dBi omni directional antenna with reverse N male connector

RBTES-BG-S1490M

14dBi gain at 90 degree sector antenna with reverse N male connector

RBTES-BG-P18M

18dBi panel antenna with reverse N male connector

RBTES-BG-PAR24M

24dBi parabolic antenna with reverse N male connector

Warranty

As a customer-centric company, Enterasys is committed to providing the best possible workmanship and design in our product set. In the event that one of our products fails due to a defect in one of these factors, we have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired as soon as possible.

Service and Support

Enterasys understands that superior service and support is a critical component of *Networks that Know*.™ The Enterasys **SupportNet Portfolio**—a suite of innovative and flexible service and support offerings—completes the Enterasys solution. SupportNet offers all the post-implementation support services you need—online, onsite or over the phone—to maintain your network availability and performance.

Additional Information

For additional information on RoamAbout, visit
enterasys.com/products/wireless

Contact Information

Contact Enterasys Sales at **877-801-7082** or
enterasys.com/corporate/contact/contact-sales.html

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